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**Datasheet for the decision  
of 3 May 2021**

**Case Number:** T 1677/18 - 3.5.05

**Application Number:** 05254863.3

**Publication Number:** 1624368

**IPC:** G06F3/048

**Language of the proceedings:** EN

**Title of invention:**

Three-dimensional motion graphic user interface and method and apparatus for providing the same

**Applicant:**

Samsung Electronics Co., Ltd.

**Headword:**

Polyhedron components 2/SAMSUNG

**Relevant legal provisions:**

EPC Art. 56

**Keyword:**

Inventive step - (no)



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**Boards of Appeal**

**Chambres de recours**

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**Case Number:** T 1677/18 - 3.5.05

**D E C I S I O N**  
**of Technical Board of Appeal 3.5.05**  
**of 3 May 2021**

**Appellant:** Samsung Electronics Co., Ltd.  
(Applicant) 129, Samsung-ro  
Yeongtong-gu  
Suwon-si, Gyeonggi-do, 443-742 (KR)

**Representative:** Grootsholten, Johannes A.M.  
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**Decision under appeal:** **Decision of the Examining Division of the  
European Patent Office posted on 5 February 2018  
refusing European patent application No.  
05254863.3 pursuant to Article 97(2) EPC.**

**Composition of the Board:**

**Chair** A. Ritzka  
**Members:** E. Konak  
E. Mille

## **Summary of Facts and Submissions**

I. The appeal is against the examining division's decision to refuse the application on the grounds that the main and the first auxiliary requests did not meet the requirements of Article 56 EPC in view of the following document:

D1: GB 2 354 920

II. With its statement setting out the grounds of appeal, the appellant maintained the main and auxiliary requests on which the decision under appeal was based as the main request and first auxiliary request, and filed a second auxiliary request. It requested that the decision be set aside and that a patent be granted on the basis of any of the requests on file. It requested oral proceedings as an auxiliary measure.

III. In its preliminary opinion issued in preparation for the oral proceedings, the board raised objections under Articles 84 and 56 EPC.

IV. The appellant did not reply in substance to the board's preliminary opinion. It merely withdrew its request for oral proceedings and requested a decision. The scheduled oral proceedings were thus cancelled.

V. Claim 1 of the main request reads as follows:

"An apparatus (500) for providing a three-dimensional motion graphic user interface, the apparatus comprising:

a control module (530) which creates a first polyhedron component (240, 410, 1810) formed of a plurality of faces, wherein at least one face (310) of the plurality of faces of the first polyhedron component has predetermined attributes and displays information from among information that is hierarchically stored using menus and sub-menus differently according to the attributes, and the first polyhedron component is separable into a plurality of second polyhedron components (340, 1310, 1330) according to a user's action with respect to the faces, wherein the displayed information has a first hierarchical level and corresponds to a given menu;

a storage module (550) which stores the first polyhedron component created by the control module;

an input module (510) to which data about a user's action with respect to the first polyhedron component is input;

a user interface module (520) which assigns the attributes to the at least one face, maps information displayed on the at least one face according to the predetermined attributes, processes motion of the first polyhedron component according to the data about the user's action input through the input module, and changes an information display according to motion of the first polyhedron component; and

an output module (540) which displays a processing result of the user interface module;

wherein the control module is configured to create a plurality of said second polyhedron components (340, 1310, 1330) assigned to a specific face (310) of said at least one face after said user's action on said specific face, and wherein the user interface module (520) maps information, from among the stored information and which corresponds to a plurality sub-menus of said given menu, onto information faces of the

second polyhedron components (340, 1310, 1330), said information corresponding to said plurality of sub-menus having a second hierarchical level different from the first level, and wherein the output module (540) displays the result of the mapping; wherein when the plurality of second polyhedron components is created, the first polyhedron component changes into the plurality of second polyhedron components and the first polyhedron component is removed."

- VI. Claim 1 of the first auxiliary request differs from claim 1 of the main request as follows (with the additions underlined and the deletions ~~struck through~~):

"[...]

a user interface module (520), including a component attribute assigning module (521), wherein the user interface module ~~which~~ assigns the attributes to the at least one face, maps information displayed on the at least one face according to the predetermined attributes, processes motion of the first polyhedron component according to the data about the user's action input through the input module, and changes an information display according to motion of the first polyhedron component, received data about a specific polyhedron component selected by a user from a group of first polyhedron components, highlights the selected polyhedron component, and modifies information mapped onto an information face of the selected polyhedron component through the component attribute assigning module; and  
[...]"

- VII. Claim 1 of the second auxiliary request differs from claim 1 of the first auxiliary request as follows (with

the additions underlined and the deletions ~~struck~~  
through) :

"[...]

wherein the control module is configured to create a plurality of said second polyhedron components (340, 1310, 1330) assigned to a specific face (310) of said at least one face after said user's action on said specific face, and wherein the user interface module (520) maps information, for each of the second polyhedron components (340, 1310, 1330) and from among the stored information and which corresponds to a plurality of sub-menus of said given menu, onto information faces of the second polyhedron components (340, 1310, 1330), said information corresponding to said plurality of sub-menus having a second hierarchical level different from the first level, and wherein the output module (540) displays the result of the mapping;

[...]"

## **Reasons for the Decision**

1. The invention relates to a 3D GUI metaphor according to which a "first polyhedron component" is separable into a plurality of "second polyhedron components". A hierarchy of menus and sub-menus is assigned to specific faces of these polyhedron components.
2. In the contested decision, it was held that the only feature of claim 1 of the main request distinguishing it from D1 was found in the last paragraph of the claim, i.e. that when the plurality of second polyhedron components is created, the first polyhedron

component changes into the plurality of second polyhedron components and the first polyhedron component is removed. In the statement setting out the grounds of appeal, the appellant did not contest that such visual effects do not have any technical effect. In its opinion, however, the feature *"wherein the control module is configured to create a plurality of said second polyhedron components (340, 1310, 1330) assigned to a specific face (310) of said at least one face after said user's action on said specific face, and wherein the user interface module (520) maps information, from among the stored information and which corresponds to a plurality sub-menus of said given menu, onto information faces of the second polyhedron components (340, 1310, 1330), said information corresponding to said plurality of sub-menus having a second hierarchical level different from the first level"* was an additional distinguishing feature. According to the appellant, D1 disclosed that the information shown on "one face" of a sub-cube had a relationship with the face of the cube but not that the "other information faces" of the sub-cube had this kind of relationship.

3. The appellant thus seems to have suggested that the second polyhedron components in claim 1 of the main request may display sub-menus on more than one face and that these sub-menus have some form of relationship with the menu on the selected face of the first polyhedron component. In its preliminary opinion, however, the board informed the appellant that whether the sub-cubes displayed sub-menus on one face or on a plurality of faces and the relationship between these menus/sub-menus were non-technical differences in GUI design in which the board could not discern any technical effect.

4. In the statement setting out the grounds of appeal, the appellant referred to T 928/03, arguing that "facilitating a continued human-machine interaction by resolving conflicting technical requirements [was] a possible technical purpose". It submitted that the distinguishing features of claim 1 of the main request resolved conflicting "technical requirements" of this kind, namely giving the user easy access to all kinds of details without overly cluttering the screen. However, as the board informed the appellant in its preliminary opinion, reducing screen clutter and presenting the user with more details in a GUI are not technical requirements.
5. Regarding claim 1 of the first auxiliary request, the appellant had argued in the statement setting out the grounds of appeal that D1 did not disclose "the modification of information" or "how a use may be enabled to modify the shown information". However, as noted in the board's preliminary opinion, modifying the presentation of a GUI does not produce a technical effect.
6. Regarding claim 1 of the second auxiliary request, in the statement setting out the grounds of appeal the appellant merely repeated its arguments with regard to the main request (see point 4 above).
7. Since the appellant did not reply in substance to the board's preliminary opinion, the board sees no reason to change it.
8. Therefore, claim 1 of the main request and the first and second auxiliary requests does not solve any objective technical problem and does not involve an



inventive step (Article 56 EPC).

9. As none of the requests is allowable, the appeal must be dismissed.

## Order

**For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:

The Chair:



K. Götz-Wein

A. Ritzka

Decision electronically authenticated